spissated by long boiling. The soluble portion appears neither resinous nor mucous. It approaches most nearly to extractive, but has characters somewhat peculiar to itself. A decoction of the root procured by boiling for ten minutes in distilled water, exhibited after filtration the following results. It was transparent, nearly colourless, and did not alter litmus. It gave no precipitate with the sulphuric, nitric, muriatic, oxymuriatic, and acetous acids. It gave no precipitate with the sulphate of iron, but formed a copious one with the nitrates of mercury and silver, and the acetate of lead. Muriate of tin produced no effect at first, but after standing, a light precipitate took place. Pearl ash, lime water, and muriate of barytes rendered the solution turbid. Acetate of barytes occasioned no change. Oxymuriate of lime formed an immediate precipitate.

The cold infusion exhibited nearly the same results as the decoction. The alcoholic solution underwent no change from muriate of tin, but threw down a dense precipitate with nitrate of mercury.

From the above experiments it appears, that the soluble principle of the Phytolacca differs from common vegetable extractive, as defined by the chemists, in several respects, particularly in

not being thrown down by the oxymuriatic or other mineral acids, and in being but partially affected by muriate of tin.

In the *Annales de Chimie*, vol. lxxii, is a memoir on the Chemical properties of the Phytolacca decandra by M. Braconnot. His experiments indicate the presence of an unusual quantity of vegetable alkali in this plant. He found that the ashes, procured by incinerating the stalks, afforded nearly 67 per cent. of dried alkaline carbonate, and 42 per cent. of pure caustic potash. This alkali in the plant is neutralized by an acid having considerable affinity to the malic, but with a few shades of difference. With lime and lead malic acid forms flocculent precipitates, very easily soluble in distilled vinegar, but those with the phytolaccic acid are insoluble. M. Braconnot thinks this acid may probably be a mean between the malic and oxalic acids, or an oxygenized malic acid.

The same memoir contains an examination of the colouring matter in the berries of the Phytolacca. The juice of these berries is of a very fine, bright purple colour, but this colour is extremely fugacious and disappears in a short time from cloth or paper that has been tinged with it. A few drops of lime water added to this purple

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